VLF Report Finan Township Sault Ste Marie Mining Division N.T.S. 42 C/SE for Claim 4276606

Frank C. Racicot (Assessment Report) Sudbury Ontario Shaun Parent (Field Work and Interpretation) Batchawana, Ontartio May 5, 2015

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1.0 Introduction

In early April, 2015 Shaun Parent conducted 8 VLF profile survey lines over claim 4276606 for Argonaut Resources Inc.

The claim is located about 6 km southeast of the town of Dubreville Ontario. The claim was initially due on April 10th- but a short extension was requested and granted as Mr Parent encountered difficult field conditions. Extra time was also required to process and interpret the field data.

Mr. Parent in conjunction with his Portuguese colleague, uses a unique algorithm and software package that allows him to process the data and display the data as profiles and 3D models. They are included in this report. Racicot and Parent are co-authors of this report.

Racicot wrote the first 9 sections of this report, which include 'limited comments' regarding the Interpretation and Recommendations sections (Sections 8.0 and 9.0). Mr. Parent's contributions to those two sections are more comprehensive.

Racicot is the temporary agent for this days for this claim only, in order to write and submit this assessment report. The official agent for all of the Prodigy/Argonaut claims is Randy Sedor and his contact information phone number is: (705) 717-8506.

2.0 Property Ownership

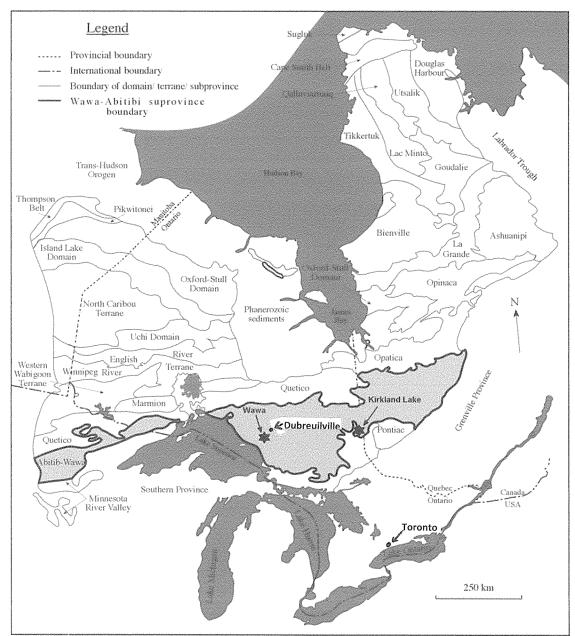
The claims are listed in the MNDM data base as being held by Prodigy Gold Inc, but actual ownership of the claims is by Argonaut Gold. Their address is:

Argonaut Gold 9600 Prototype Court. Reno Nevada USA 89521

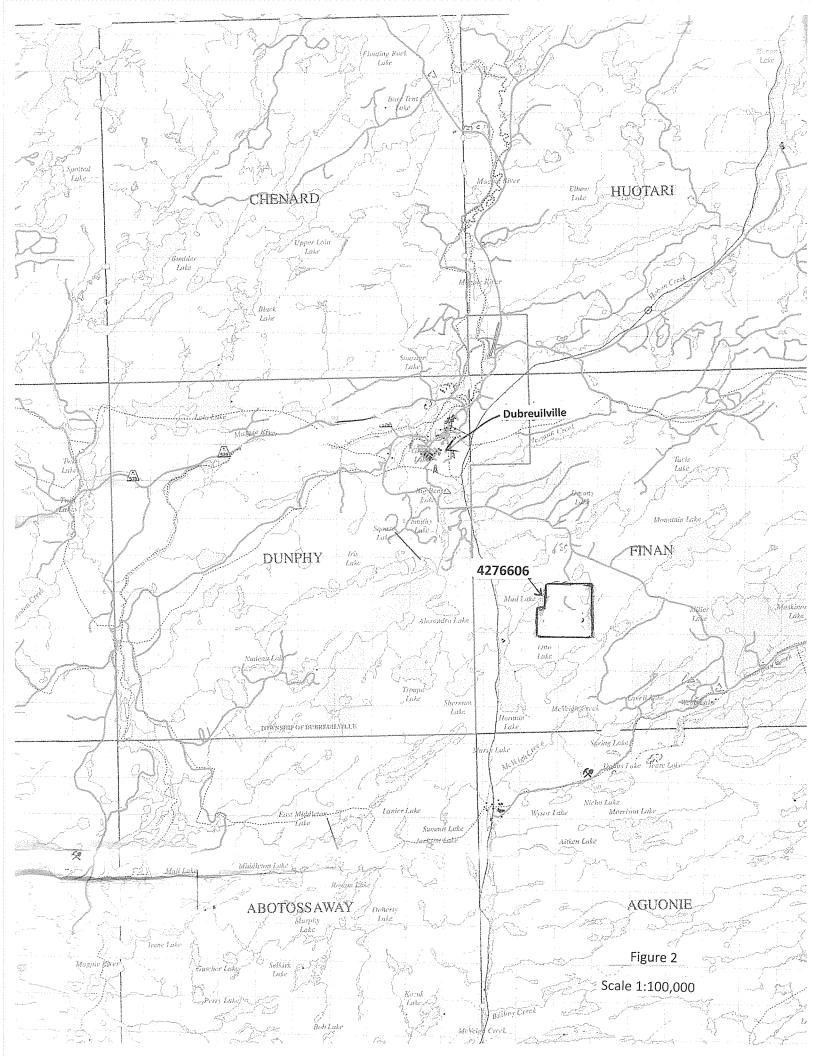
3.0 Location and Access

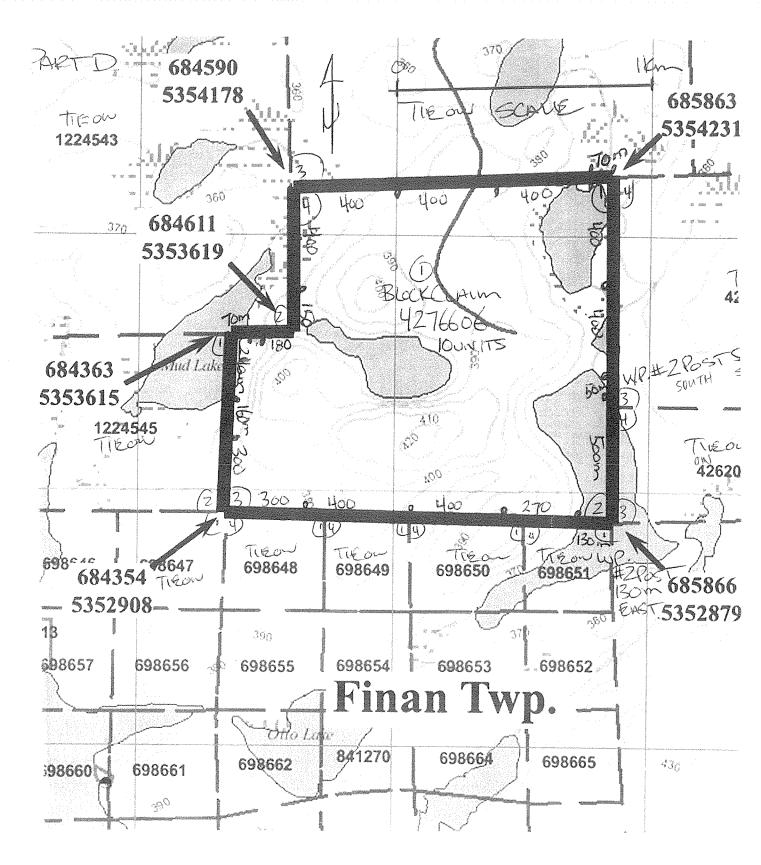
This claim is in Finan Township in the Sault Ste Marie Mining District. To get to the claims, one drives about 30 km north from Wawa on highway 17 and then turns east on highway 579, just before Desolation Lake. After proceeding east on 579 for about 30 km this will bring you to the small town of Dubreuiville.

About 1 km before the town of Dubreville- one turns east on the Goudreau Road and travels for about 6 km and then turns south at approximately 685300E. The north boundary of claim 4276606 is about 1 km south of Goudreau Road. Figure 1 shows the location of Wawa and Dubreuilville. Figure 2 shows the location of claim 4276606 in Finan Township and Figure 3 shows the original claim sketch.



Map of the Superior Province modified after Card and Ciesielski, (1986).





Original Sketch For Claim 4276606

Figure 3

4.0 Previous Exploration Work

There was little work was done in the specific area of the claim largely due to the fact that the according to geology map P.3168, the underlying rocks are metamorphosed alkalic and felsic intrusive rocks belonging to the Herman Lake Alkalic Rock Complex. This alkalic complex is surrounded by mafic to intermediate metavolcanic rocks.

According to the Geological Data Inventory File 139 (GDIF 139) published in 1983 there was no work done in this area.

Additional search on the Geology Ontario website indicated there was some work done on the periphery of this claim after 1983.

In 1985 Ferderber Geophysics conducted an airborne VLF-EM and aeromagnetic survey over 268 claims in Finan Township and neighboring townships. A total of 1123 line miles (entire survey) were flown at a spacing of 440 feet (1/12th mile) and an elevation of 250 feet above the landscape. The southern part of the survey in area A (Finan and Jacobson Townships) managed to cover all of claim 4276606.

The aeromagnetic survey located a northeast trending feature from Mud Lake to Aloft and one mile to the south represent "magnetic concentrates of the Aloft Lake Granite Stock, possibly a hybrid rock type".

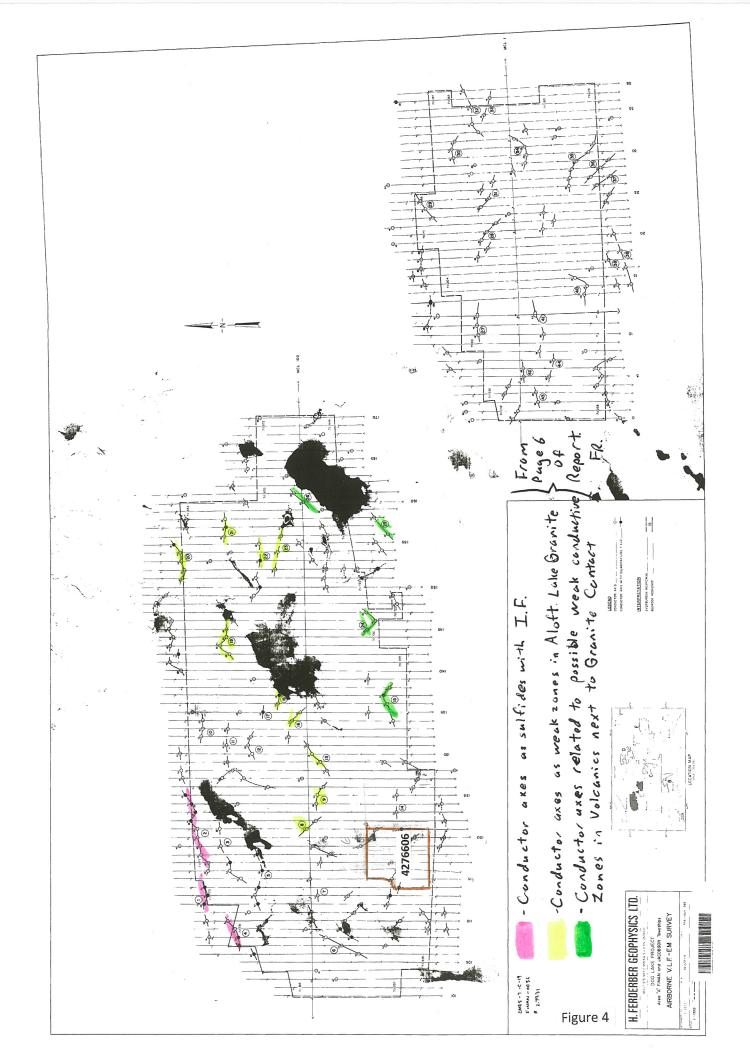
Note: Aloft Lake is also called Mountain Lake on some maps and reports. Dreamy Lake is also called Dreany Lake and Dreary Lake on other maps (likely typos)- only adding to the confusion.

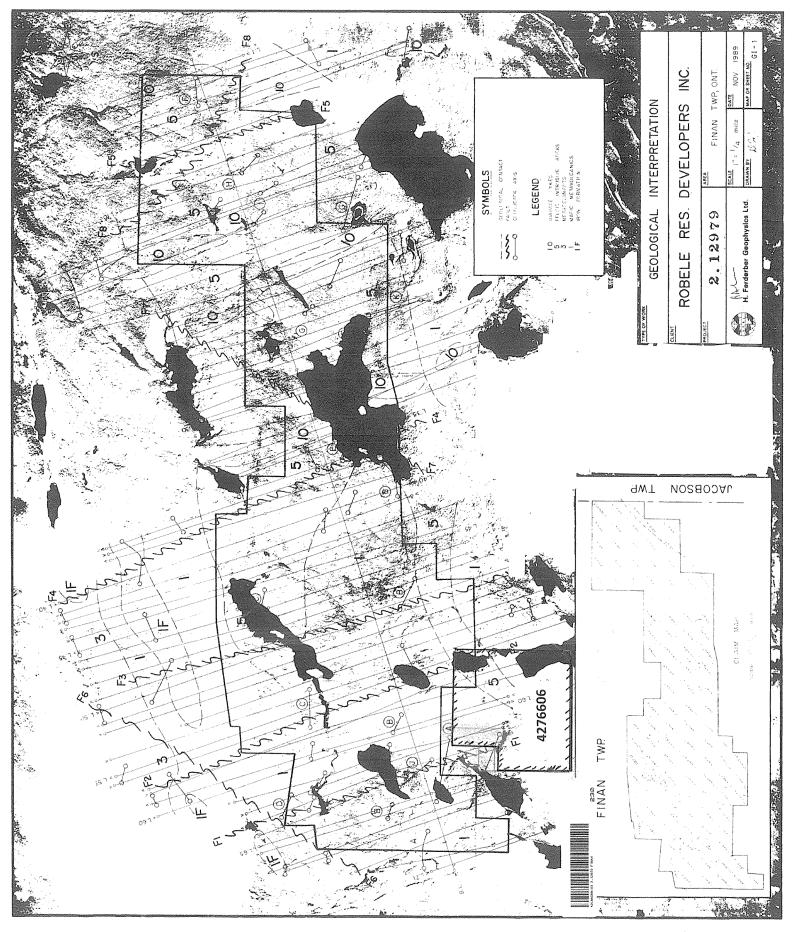
The VLF-EM survey located 26 anomalies associated with some sort of bedrock structure(s), none of which are located in, or close to claim 4276606 (see Figure 4). Anomaly 14 just east of the claim did not warrant discussion and may be some sort of overburden conductor.

In 1989 a combined magnetic and VLF-electromagnetic survey of 156.4 miles was flown for Robele Resource Developers Inc. over an area just north of claim 4276606- although some of the survey results extended down into the claim.

The magnetic survey located the same general northeast magnetic trend as the previously discussed survey done in 1985.

Eleven conductive zones were located by the VLF survey (see Figure 5). Conductive zone A "is comprised of two conductors, but appears to be caused by conductive overburden". A north trending fault (F1) was also located by the survey.





5.0 Geology

Claim 4276606 is located along the northern flank of the Wawa Greenstone Belt of the Archean Superior Province (also referred to as the Michipcoten Greenstone Belt). See | Figure 6. The oldest supracrustal rocks in Finan Township, which are exposed mainly in the southern part of the township, are intermediate to felsic metavolcanics consisting largely of tuff, lapilli tuff, coarse breccia, feldspar crystal tuff, quartz-feldspar tuff. These rocks are succeeded by massive and pillowed mafic and intermediate metavolcanics.

The intermediate to felsic metavolcanics are separated from the intermediate to mafic metavolcanic by a stratigraphically continuous horizon of tightly folded, Michipicoten iron formation.

The youngest supracrustal rocks in Finan Township are metasediments, consisting of wacke, siltstone and local lenses of Dore-type conglomerate.

Within Finan Township there are many intermediate to mafic intrusions, ranging from quartz diorite to gabbro. These two types of intrusions are generally concordant or sill-like and according to Sage (1990) "host or occur near, a large number of the gold showings."

A large, homogeneous granodiorite stock known as the Muskinoge Lake stock underlies a large area of the east central part of Finan township. This stock is elliptical, has a northeast trending axis and is about 4000 meters long.

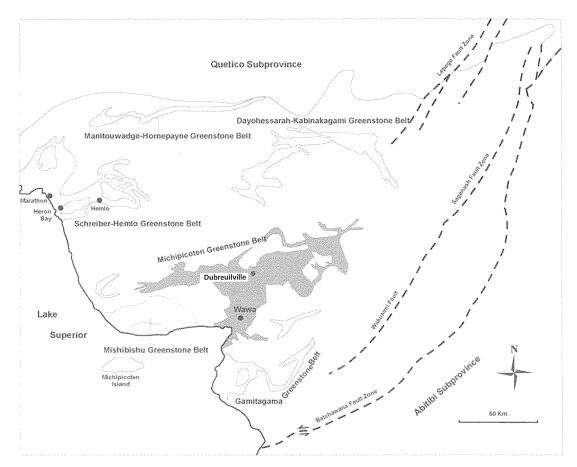
A large body of generally coarse grained nepheline syenite occurs in the west-central part of Finan Township including all of claim 4276606. This syenite is known as the Herman Lake alkalic rock complex and is interpreted to be intruded by the Muskinoge Lake stock. The Herman stock is elongated with a northeast orientation and is about 6500m long. The outer portion of the complex is nephaline-bearing and the central portion is cancrinite-bearing.

All of the above rocks are cut by later, northwest trending diabase dikes that occupy faults or shear zones- including two dikes that cut the edge of claim 4276606. There are numerous northeast trending diabase dikes, especially to the east and south of this claim.

No obvious major faults or lineaments appear to cut the property.

6.0 Geophysical Instrument

The unit used for the VLF survey was a portable, hand held EM16 VLF-EM unit, manufactured by Geonics Limited. VLF stands for very low frequency and refers to radio waves in the range of 3 kHz to 30kHz and are principally used by the US navy to communicate with submarines around the world.



Map showing the location of the Michipicoten Greenstone Belt (shaded in grey color) modified after Williams et al (1991).

Two transmitting stations used in this survey: NAA, a transmitter in Cutler, Maine, transmitting at 24.8kHz and NML a transmitter in La Moure, North Dakota. The value of using two transmitting stations was to eliminate and spurious reading encountered in the field. Only the values for NAA were used in preparation of this report.

7.0 Geophysical Work Performed

A total of 9 km on 8 north-south lines were surveyed with the VLF unit. Lines were controlled with a compass and GPS. Station locations were taken every 20 meters and the station co-ordinates and elevation were recorded every 20 meters.

All of the VLF lines are shown in Figure 2.

8.0 Racicot Interpretation Comments (Limited)

Mr. Parent uses a proprietary software program that allows him to process the Fraser Filter readings and distinguish between surface and bedrock conductors- as well as different resistivity contrasts (ie different rock types).

The software, called VLF2DMF, uses the Fraser filtered profiled data and produces contoured results on a plan map. Positive peaks in the In-Phase component are shown as orange and negative peaks in the Quadrature component are shown on the plan maps as blue. Some of those plan maps for the aforementioned VLF survey lines are included in this report.

The software allows Mr. Parent to do inversions as a fast way to obtain a depth estimate, dip and apparent width of a conductor. It also allows him to take into account the resistivity of the ground and clearly distinguish between surficial clay and real conductors, something that is still difficult to do unless using Parent's program. In the past, Fraser filters only showed the peaks, or areas of conductivity, but not the depth.

By combining the real elevations with the data, this provides a better correlation between the VLF results and any creeks, depressions or elevations- better adding to the potential interpretation(s).

The detailed interpretation of results and recommendations as well as the raw and filtered data, various profiles and the model done by Mr. Parent are included at the end of this report.

The geology underlying claim 4276606 is predominately the northeast trending nephaline-cancrinite syenite, referred to as the Herman Lake Alkalic Complex. The greenstone volcanic rocks and metasedimentary rocks that surround this alkalic complex also trend northeast. Interestingly, the VLF survey performed by Mr. Parent located a strong VLF conductor near the center of the claim- trending at about 100 degrees. While one might not expect a gold showing in nephaline syenite, the fact that the trend of the VLF anomaly is contrary to the regional geology, might indicate a possible late zone of

weakness or geological contact that is contrary to what the geological map indicates (and hence possible mineralization).

Shaun Parent has noted probable mafic volcanic rocks on the south and north shore of the small lake on the claim.

The interpretation of results and recommendations, including the raw and filtered data, various profiles and the model by Mr. Parent are included at the end of this report.

9.0 Racicot Recommendations: (Limited)

It is recommended that the recommendations by VLF expert, Shaun Parent be considered.

In addition to ground truthing and prospecting the VLF anomalies- specifically in the area of the survey- perhaps it might be appropriate to consider doing some sort of geochemical survey in vicinity of the VLF conductors to determine if there are any anomalous gold values in proximity to the conductors.

10.0 <u>References</u>

1) Fenton Scott. 1985. Report On Airborne Geophysical Surveys, Dog Lake Area by Ferderber Geophysics Ltd. 42C08NE0044

2) Campbell Robert A. 1989. Report On The Combined Airborne Magnetic and VLF-Electromagnetic Survey on the Property of Robele Resource Developers Inc by H. Ferderber Geophysics Ltd. 42C08SW0183

3) Sage, R.P. 1990. Precambrian geology, Finan Township, Ontario Geological Survey, Preliminary Map P3168. Scale 1:15840

4) Parent Shaun. 2015 Personal Communication

11.0 Statement of Qualifications

Frank Racicot graduated from Laurentian University in 1974 with BSc in geology. He has over 30 years of varied experience in mineral exploration working for a variety of junior and larger exploration companies. I am also a member in good standing with the Association of Professional Geoscientists of Ontario (APGO).

Racicot's address is: 734 Whittaker St. Sudbury, Ontario P3E 4B2



Α

VLF EM-16 Surveying Report

On

Claim 4276606

Prepared For

Argonaut Gold

Ву

Shaun Parent

Superior Exploration Adventure and Climbing Co. Ltd.

April 23, 2015

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Executive Summary:

Unpatented Mining claim 4276606 is located in the mining district of Sault Ste. Marie, Claim Map M-1584 in the Township of Finan (Figure-A).

A VLF EM-16 survey program was carried out in April 2015, using a Geonics VLF EM-16 and a handheld Garmin GPS-60C. 2 transmitter stations were read during the course of the survey; NAA 24.0 KHz – Cutler, Maine and NML 25.2KHz- La Moure, North Dakota.

This report reviews and interprets the results of frequency NAA 24.0 KHz – Cutler, Maine only.

The objective of the 2015 VLF EM-16 survey was to determine if the VLF Survey could delineate economic mineralization and or structures on Claim 4276606. The survey was also carried out for assessment work.

Introduction

A VLF-EM16 survey is a relatively simple and economic geophysical survey that is used to better understand shallow, vertical and sub vertical bedrock conductors.

This report describes the findings and results of the VLF EM-16 survey utilizing the new VLF 2DMF processing software of which the author of this report has assisted in its development.

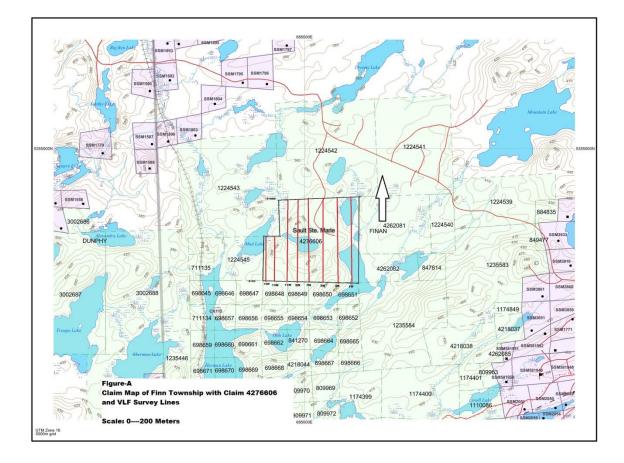
VLF2DMF is a software package that has been developed in order to enable the processing and inversion of electromagnetic (EM) induction data acquired at a Very Low Frequency (VLF).

VLF2DMF is capable of inverting VLF-EM data acquired along a surveyed line at different frequencies. Data collected in a survey area can also be processed. The software produces profiles of the Raw Data, Fraser Filtered Data, KH, Resistivity and a (2-D) Modelled Inversion. The software also allows for plan maps and slices of Fraser, KH and Inversion models of separate VLF survey lines.

Personnel

The VLF EM-16 operator and GPS field navigator responsible for the collection of all raw data was Shaun Parent who was assisted by field Assistant Brett Sullivan. Processing and Interpretation of the VLF data using the VLF2DMF Software was completed by Shaun Parent.

Figure A General Location Map



Work Performed

The VLF EM-16 survey consisted of running 8 VLF Lines in a direction of 00 degrees true azimuth across Claim 4276606 (Figure B).

The VLF lines were completed while using a handheld Garmin 60-CSX GPS. Each VLF station was located based on a northerly azimuth and distance from the start of the survey line. At each line station, 2 transmitter stations were read using the Geonics VLF- Em-16 receiver. The following parameters were used throughout the survey.

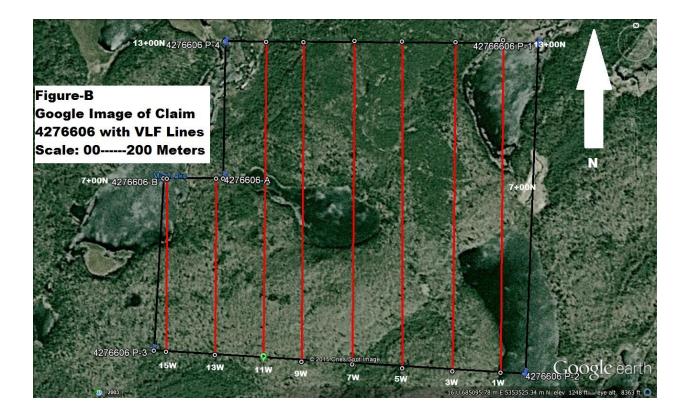
VLF Transmitters Used: NAA-24.0 KHz.-Cutler, Maine and NML-25.2 KHz.- La Moure, North Dakota.

VLF survey direction - The VLF Em-16 receiver was facing north along all lines

VLF survey stations - All readings were taken at approximately 20 meter stations along the survey line.

Parameters of Measurement - In-phase and Quad-phase components of vertical magnetic field as a percentage of horizontal primary fields. (Tangent of tilt angle and ellipticity). VLF transmitter NAA was to the east. The transmitters are chosen so that the direction to the transmitting station is as close to the orientation of the bedrock strike.

Figure-B



VLF Data Processing

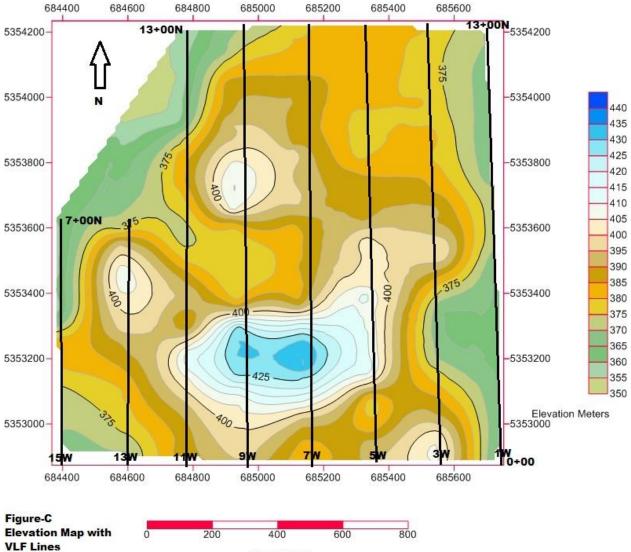
- Field data was collected as follows on each surveyed line.
- Each station location and elevation was saved onto the Handheld Garmin 60CSX, GPS Unit. Figure C is a topographic map of the area surveyed.
- VLF readings for each station were recorded in a notebook as In-Phase and Quadrature corresponding to the line number and station number. (See example in Table 1)

L1 W	NAA In phase	NAA Quadrature	NML In phase	NML Quadrature	Notes
0+00	10	6	4	5	Rusty
0+20N	8	4	2	4	Outcrop
0+40N	6	5	0	2	

Table 1Example of VLF Field Data Collection

- Field information was transferred to a Garmin map source program where line and station information could be viewed.
- Garmin and VLF data were compiled onto an excel spreadsheet and then inputted into the VLF2DMF processing software.

Figure C





VLF Data Profiles

The data collected was processed using the VLF2DMF software. Profiles of Raw Data (A) and Fraser Filtered Data (B) were produced for each line surveyed and are displayed in Figures 1 thru 16.

A: VLF Raw Data Profiles for NAA

Raw data was plotted for each line surveyed. The raw data profiles are listed as figures for each line based on the line number. Ex: Figure 1: NAA Line 1W-A

B: Fraser Filter Profiles for NAA

Raw data was run through the Fraser filter. This filter transforms In-Phase cross overs and inflections into positive peak anomalies. In-Phase inflections and cross overs are usually plus to minus, while Quadrature responses are negative to positive, giving a negative peak anomaly when the Fraser Filter is applied. VLF anomalies were chosen based on the location of the peaks on the Fraser Filter profile. The Fraser filter profiles for each line surveyed are listed as figures based on the line number Ex: Figure 2: NAA Line 1W-B

Figure 1: NAA Line 1W-A: Raw Data Profile

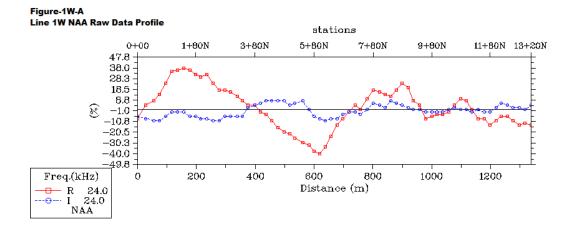


Figure 2: NAA Line 1W-B: Fraser Filter Profile

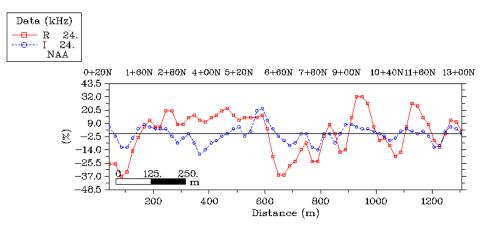


Figure-1W-B Line 1W NAA Fraser Filter Profile

Figure 3: NAA Line 3W-A: Raw Data Profile

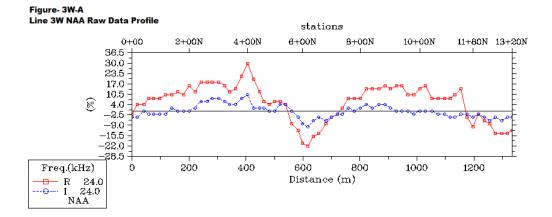


Figure 4: NAA Line 3W-B: Fraser Filter Profile

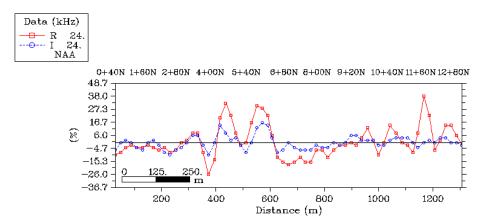


Figure-3W-B Line 3W NAA Fraser Filter Profile

Figure 5: NAA Line 5W-A: Raw Data Profile

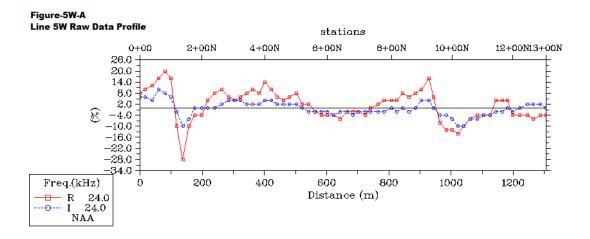


Figure 6: NAA Line 5W-B: Fraser Filter Profile

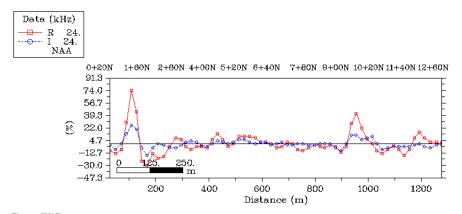


Figure 5W-B Line 5W NAA Fraser Filter Profile

Figure 7: NAA Line 7W-A: Raw Data Profile

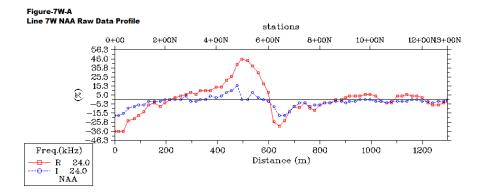


Figure 8: NAA Line 7W-B: Fraser Filter Profile

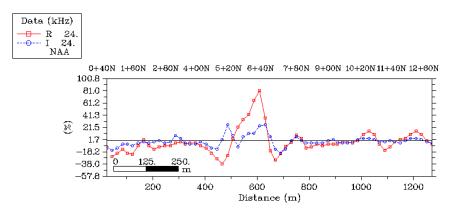


Figure-7W-B Line 7W NAA Fraser Filter Profile

Figure 9: NAA Line 9W-A Raw Data Profile

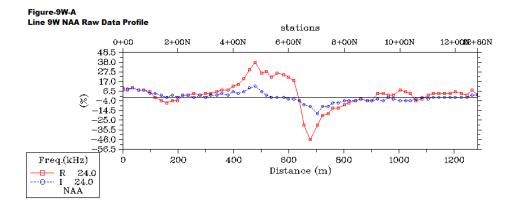


Figure 10: NAA Line 9W-B: Fraser Filter Profile

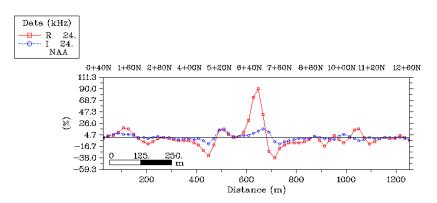


Figure-9W-B Line 9W NAA Fraser Filter Profile

Figure 11: NAA Line 11W-A: Raw Data Profile

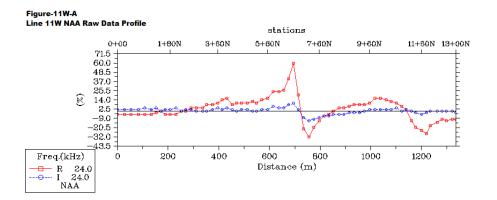


Figure 12: NAA Line 11W-B: Fraser Filter Profile

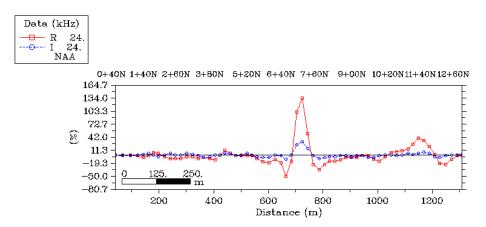


Figure-11W-B Line 11W NAA Fraser Filter Profile

Figure 13: NAA Line 13W-A: Raw Data Profile

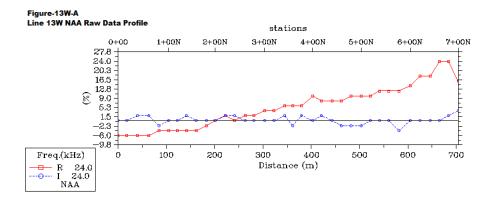


Figure 14: NAA Line 13W-B: Fraser Filter Profile

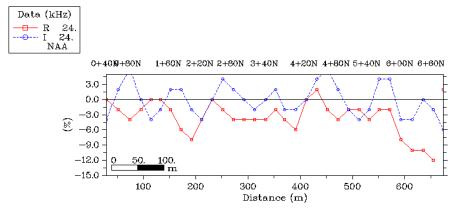


Figure-13W-B Line 13W NAA Fraser Fliter Profile

Figure 15: NAA Line 15W-A: Raw Data Profile

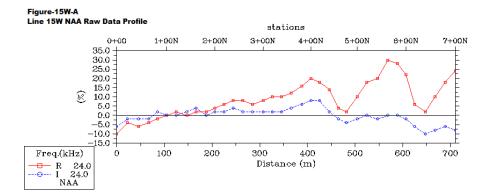


Figure 16: NAA Line 15W-B Fraser Filter Profile

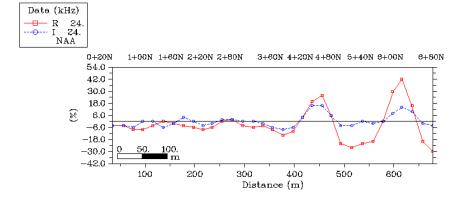


Figure-15W-B Line 15W NAA Fraser Filter Profile

Discussion of Results

- The VLF data for transmitter NAA was plotted as Raw Data and Fraser Filter Profiles. The Fraser Filter peaks were the basis for the VLF anomaly trends.
- A summary of VLF anomalies for TX-NAA for each VLF line are listed in Tables 2 through 9. These tables include the UTM of each anomaly and station location of each anomaly identifier.
- All NAA VLF Conductors are shown on google image in Figure 16.
- Fraser Filter contours of In-Phase peaks across the VLF grid are shown in Figure D.
- Fraser Filter contours of the Quadrature peaks are shown in Figure E.
- A 3D shadow contour map of the In-Phase peaks is displayed in Figure F.
- A 3D shadow contour map of the Quadrature peaks is displayed in Figure G.

UTM L	ocation	Line Location	VLF Anomaly Symbol
685739	5352937	0+60N	1W NAA-A
685751	5353060	1+80N	1W NAA-B
685748	5353139	2+60N	1W NAA-C
685743	5353218	3+40N	1W NAA-D
685741	5353337	4+60N	1W NAA-E
<mark>685733</mark>	<mark>5353462</mark>	<mark>5+80N</mark>	<mark>1W NAA-F</mark>
685724	5353619	7+40N	1W NAA-G
685722	5353701	8+20N	1W NAA-H
<mark>685715</mark>	<mark>5353817</mark>	<mark>9+40N</mark>	<mark>1W NAA-I</mark>
686708	5353896	10+20N	1W NAA-J
686707	5353995	11+20N	1W NAA-K
685701	5354135	12+60N	1W NAA-L

Transmitter NAA- Cutler, Maine 24.0 Hz.

Table 3VLF Interpretation Table Line 3W TX NAA

Transmitter NAA- Cutler, Maine 24.0

Line 3W					
UTM L	ocation	Line Location	VLF Anomaly Symbol		
685552	5352985	1+00N	3W NAA-A		
685548	5353049	1+60N	3W NAA-B		
685542	5353109	2+20N	3W NAA-C		
<mark>685544</mark>	5353229	<mark>3+40N</mark>	<mark>3W NAA-D</mark>		
<mark>685559</mark>	<mark>5353331</mark>	<mark>4+40N</mark>	<mark>3W NAA-E</mark>		
<mark>685563</mark>	<mark>5353444</mark>	<mark>5+60N</mark>	<mark>3W NAA-F</mark>		
685549	5353603	7+20N	3W NAA-G		
685548	5353682	8+00N	3W NAA-H		
685527	5353784	9+00N	3W NAA-I		
685523	5353844	9+60N	3W NAA-J		
685510	5353925	10+40N	3W NAA-K		
685485	5354045	11+60N	3W NAA-L		
685494	5354145	12+60N	3W NAA-M		

UTM L	ocation	Line Location	VLF Anomaly Symbol
<mark>685342</mark>	5353048	<mark>1+20N</mark>	<mark>5W NAA-A</mark>
685341	5353127	2+00N	5W NAA-B
685324	5353211	2+80N	5W NAA-C
685329	5353308	3+80N	5W NAA-D
685330	5353368	4+40N	5W NAA-E
<mark>685334</mark>	<mark>5353487</mark>	<mark>5+60N</mark>	<mark>5W NAA-F</mark>
685330	5353547	6+20N	5W NAA-G
685323	5353627	7+00N	5W NAA-H
685319	5353730	8+00N	5W NAA-I
685312	5353787	8+60N	5W NAA-J
<mark>685308</mark>	<mark>5353886</mark>	<mark>9+60N</mark>	<mark>5W NAA-K</mark>
685301	5354026	11+00N	5W NAA-L
685289	5354120	12+00N	5W NAA-M
685280	5354185	12+60N	5W NAA-N

Transmitter NAA- Cutler, Maine 24.0

Table 5VLF Interpretation Table Line 7W TX NAA

Transmitter NAA- Cutler, Maine 24.0

Line 7W					
UTM L	ocation	Line Location	VLF Anomaly Symbol		
685136	5352994	1+00N	7W NAA-A		
<mark>685138</mark>	5353075	1+80N	7W NAA-B		
685140	5353215	3+20N	7W NAA-C		
685136	5353271	3+80N	7W NAA-D		
<mark>685110</mark>	<mark>5353515</mark>	<mark>6+20N</mark>	<mark>7W NAA-E</mark>		
<mark>685115</mark>	<mark>5353655</mark>	<mark>7+60N</mark>	<mark>7W NAA-F</mark>		
685121	5353733	8+40N	7W NAA-G		
685111	5353848	9+60N	7W NAA-H		
685114	5353930	10+40N	7W NAA-I		
685099	5354109	12+20N	7W NAA-J		

Line 9W					
UTM L	ocation	Line Location	VLF Anomaly Symbol		
<mark>684952</mark>	5353022	<mark>1+20N</mark>	<mark>9W NAA-A</mark>		
684934	5353180	2+80N	9W NAA-B		
684938	5353282	3+80N	9W NAA-C		
<mark>684929</mark>	<mark>5353422</mark>	<mark>5+20N</mark>	<mark>9W NAA-D</mark>		
<mark>684923</mark>	<mark>5353557</mark>	<mark>6+60N</mark>	<mark>9W NAA-E</mark>		
684921	5353783	8+80N	9W NAA-F		
684923	5353861	9+60N	9W NAA-G		
<mark>684911</mark>	5353960	<mark>10+60N</mark>	<mark>9W NAA-H</mark>		
684901	5354062	11+60N	9W NAA-I		
684893	5354121	12+20N	9W NAA-J		

Transmitter NAA- Cutler, Maine 24.0

Table 7VLF Interpretation Table Line 11W TX NAA

Transmitter NAA- Cutler, Maine 24.0

Line 11W					
UTM L	ocation	Line Location	VLF Anomaly Symbol		
684769	5352983	0+80N	11W NAA-A		
684787	5353065	1+60N	11W NAA-B		
684786	5353208	3+00N	11W NAA-C		
684782	5353247	3+40N	11W NAA-D		
684780	5353324	4+20N	11W NAA-E		
684783	5353423	5+20N	11W NAA-F		
684773	5353423	6+00N	11W NAA-G		
<mark>684766</mark>	5353603	<mark>7+00N</mark>	11W NAA-H		
684759	5353840	9+40N	11W NAA-I		
<mark>684751</mark>	5354024	<mark>11+20N</mark>	<mark>11W NAA-J</mark>		

	<u>Line 13W</u>					
UTM L	ocation	Line Location	VLF Anomaly Symbol			
<mark>684594</mark>	5353056	<mark>1+40N</mark>	<mark>13W NAA-A</mark>			
684586	5353154	2+40N	13W NAA-B			
684581	5353276	3+60N	13W NAA-C			
<mark>684580</mark>	<mark>5353354</mark>	<mark>4+40N</mark>	<mark>13W NAA-D</mark>			
<mark>684579</mark>	<mark>5353434</mark>	<mark>5+20N</mark>	<mark>13W NAA-E</mark>			
684579	5353492	5+80N	13W NAA-F			
684573	5353555	6+40N	13W NAA-G			

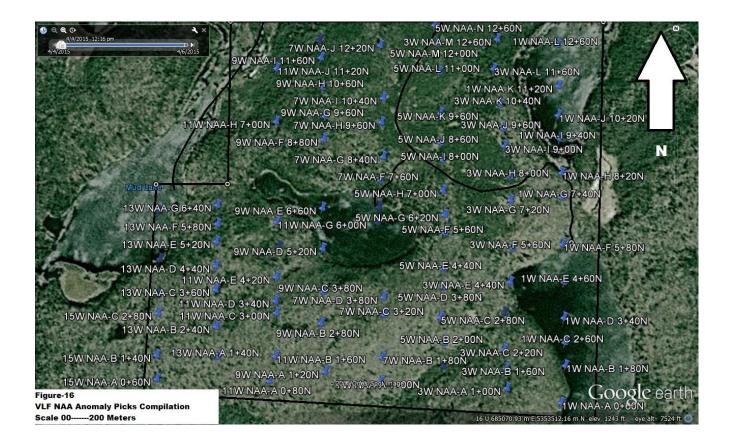
Transmitter NAA- Cutler, Maine 24.0KHz

Table 9VLF Interpretation Table Line 15W TX NML

Line 15W			
UTM Location		Line Location	VLF Anomaly Symbol
684392	5352973	0+60N	15W NAA-A
684390	5353052	1+40N	15W NAA-B
684387	5353190	2+80N	15W NAA-C
684385	5353251	3+40N	15W NAA-D
<mark>684383</mark>	5353369	<mark>4+60N</mark>	<mark>15W NAA-E</mark>
<mark>684370</mark>	5353529	<mark>6+20N</mark>	<mark>15W NAA-F</mark>

Transmitter NAA- Cutler, Maine 24.0Khz

Figure 17: VLF NAA Anomaly Picks



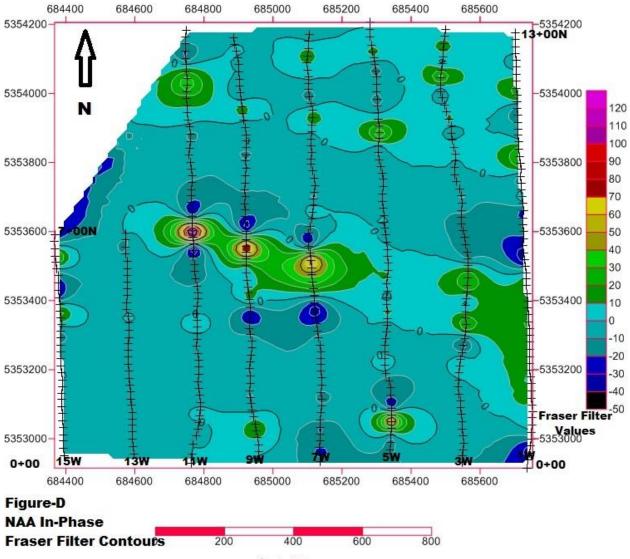
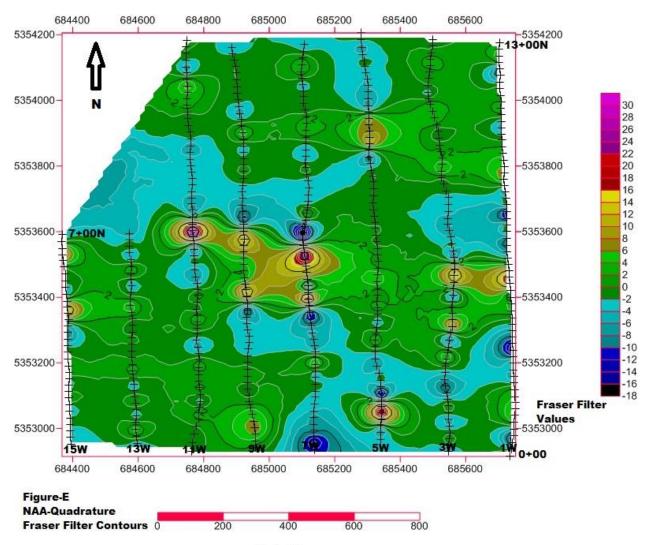


Figure D: NAA In-Phase Fraser Filter Contours

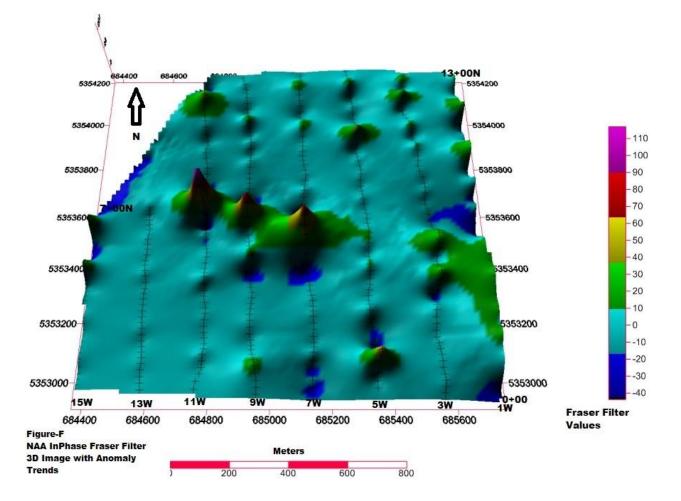
Scale Meters



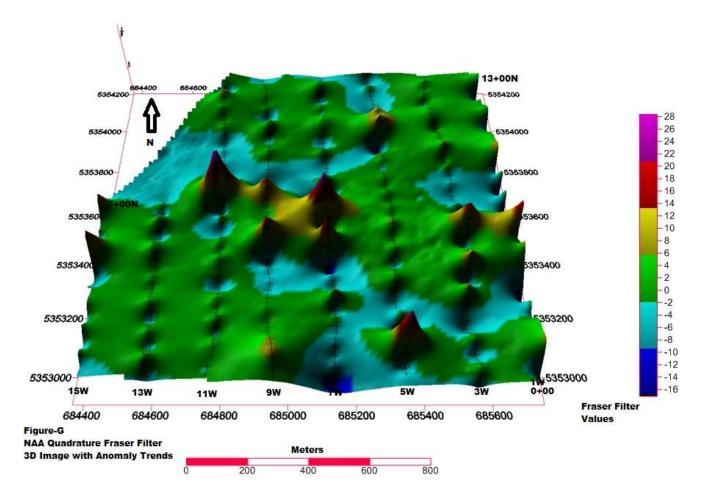


Scale Meters









Conclusions

Refer to Figures 16, C, D, E, F, G

The Ground VLF EM-16 Survey was successful in outlining:

- a) Several VLF trends across claim 4276606, interpreted between the 200 meter lines.
- b) It is difficult to join the VLF conductor picks (Figure 16) across the grid, with a line spacing of 200 meters and no geological information.
- c) A strong VLF conductor on lines 7W, 9W and 11W located within a low lying area that has a small lake.
- d) A weak VLF conductor on Line 1W and 3W might be the eastern strike extension of VLF conductor in C.
- e) Based on the contour maps of the Fraser Filtered peaks, there are several weak VLF conductors that trend across the grid in the northern and southern sections of the VLF grid.
- f) The use of transmitter NAA was useful to obtain good coupling for an east /west geological strike.
- g) The processing of raw VLF data using the VLF2D Software program to delineate Fraser Filter peaks of both In-Phase and Quadrature was successful.

Recommendations

- Ground proofing and prospecting of priority VLF anomalies should be followed up on to determine if these anomalies are related to mineralization, fault zones, structural contacts or overburden response. The priority VLF anomalies are highlighted in yellow on the VLF Interpretation tables for each VLF line.
- Processing of VLF data for Transmitter NML which was obtained during the VLF survey on Claim 4276606.
- Further modelling of the VLF data NAA using the VLF2DMF software to obtain KH Profiles, Resistivity profiles and VLF line models. Such modelling can assist in determining the type of VLF anomalies and the trends across the grid.
- Further VLF surveying:
 - $\circ~$ extend lines 13W and 15W to the north, to include stations up to 13+00N
 - VLF surveying of lines 2W, 4W, 6W, 8W, 10W, 12W & 14W to obtain more detail on the VLF trends found in the survey area. These infill lines will give more detail for interpretation and contouring of the Fraser Filter Peaks.

List of References

Baker, H.A., and J.O. Myers, 1979, VLF-EM model studies and some simple quantitative applications to field results: Geoexploration 17, 55-63

Fraser, D.C., 1969. Contouring of VLF-EM data. Geophysics, 34 958-967

Geonics Ltd., 1997: Operating Manual for VLF Em-16

Karous, M and Hjelt, S.E., 1983: Linear filtering of VLF dip-angle measurements, Geophysical Prospecting 31, 782-794

McNeil, J.D. and Labson; 1991: Geological Mapping using VLF radio fields. In Nabghian, M.N Ed, Electrical Methods in Applied Geophysics 11. Soc. Expl. Geoph, 521-640

Sayden, A.S, Boniwell, J.B; 1989: VLF Electromagnetic Method, Canadian Institute of Mining and Metalurgy, Special Volume 41, 111-125 of VLF-EM Data

Monteiro Santos, F.A; 2013: VLF 2D V1.3 A program for 2D inversion

Certificate of Qualifications

I, Shaun Parent, P. Geo (LTD.) residing at 282 B Whispering Pines Road, Batchawana Bay, Ontario do certify that:

- 1. I am a consulting Geoscientist with Superior Exploration, Adventure & Climbing Co. Ltd.
- 2. I graduated with a Geological Technician Diploma from Sir Sandford Fleming College in 1986.
- 3. I graduated with a BSc. from the University of Toronto in 1986
- 4. I am a member in good standing with the Association of Professional Geoscientists of Ontario #1955 and a member of the Prospectors and Developers Association of Canada.
- 5. I have been employed continuously as a Geoscientist for the past 26 years since my graduation from College and University.
- 6. The nature of my involvement with this project was to carry out the VLF Survey and the interpretation of the VLF data using the EMTOMO VLF2D Software of which I have been developing with Dr. Fernando Santos of Lisbon, Portugal.

Dated this 24th day of April 2015

Shaun Parent, Dipl-Geo, BSc. P. Geo (Limited)

